Visualization and Dashboards

User Interfaces

Most people that have Ignition will use it to create displays, controls, dashboards, trends, interactive database forms, etc. to help their operators and managers keep track of their processes. The Vision module allows you to create Clients (Runtimes) that include all of these types of HMI/SCADA screens.

If you are using more modules than just Vision, you can link their tools together to create many types of screens, and set up just about anything you can imagine. Here are just a few examples of screens you can create in Ignition:

- **Realtime Status and Control**
- **Dashboards**
- **Historical Trending**
- **Templates**
- **Alarm Status**
- **Database Manipulation**
- **Reporting**

Because Ignition is so flexible, you can create exactly what you want with it. No more compromising on features, just build what you need!
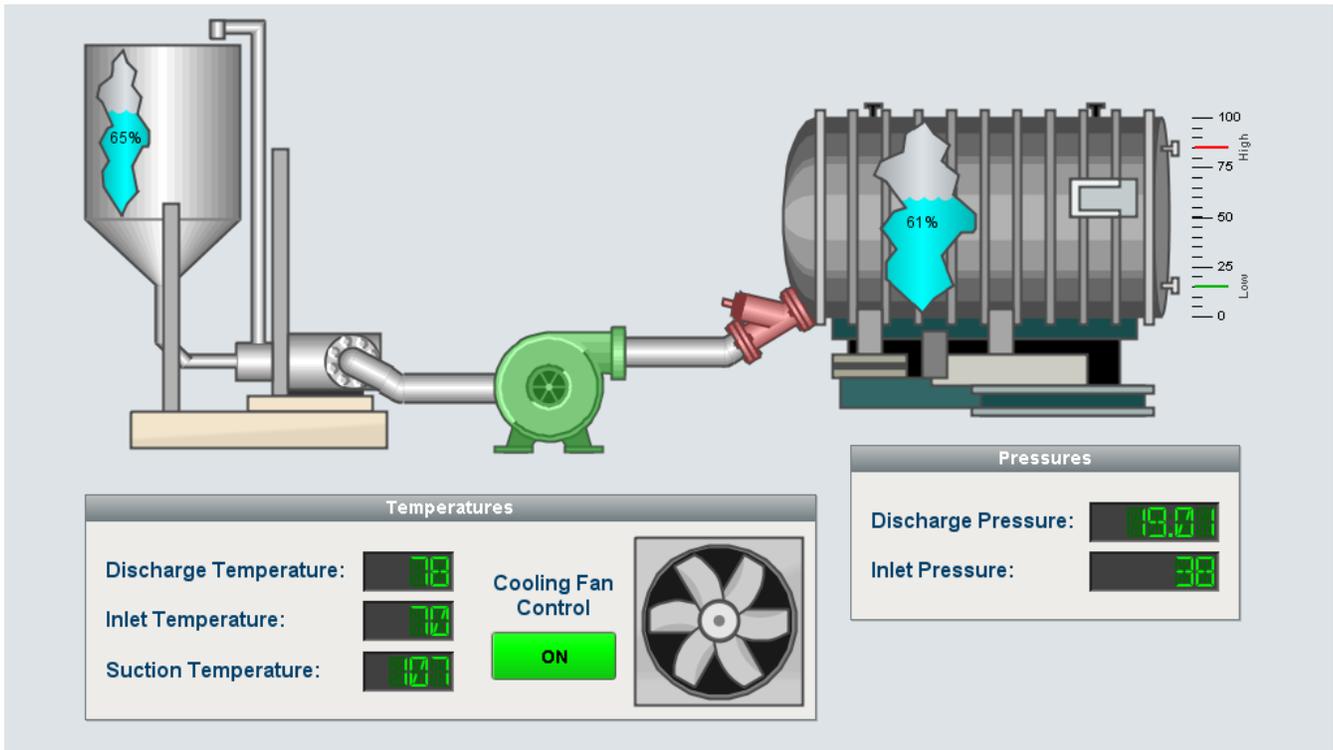
Realtime Status and Control

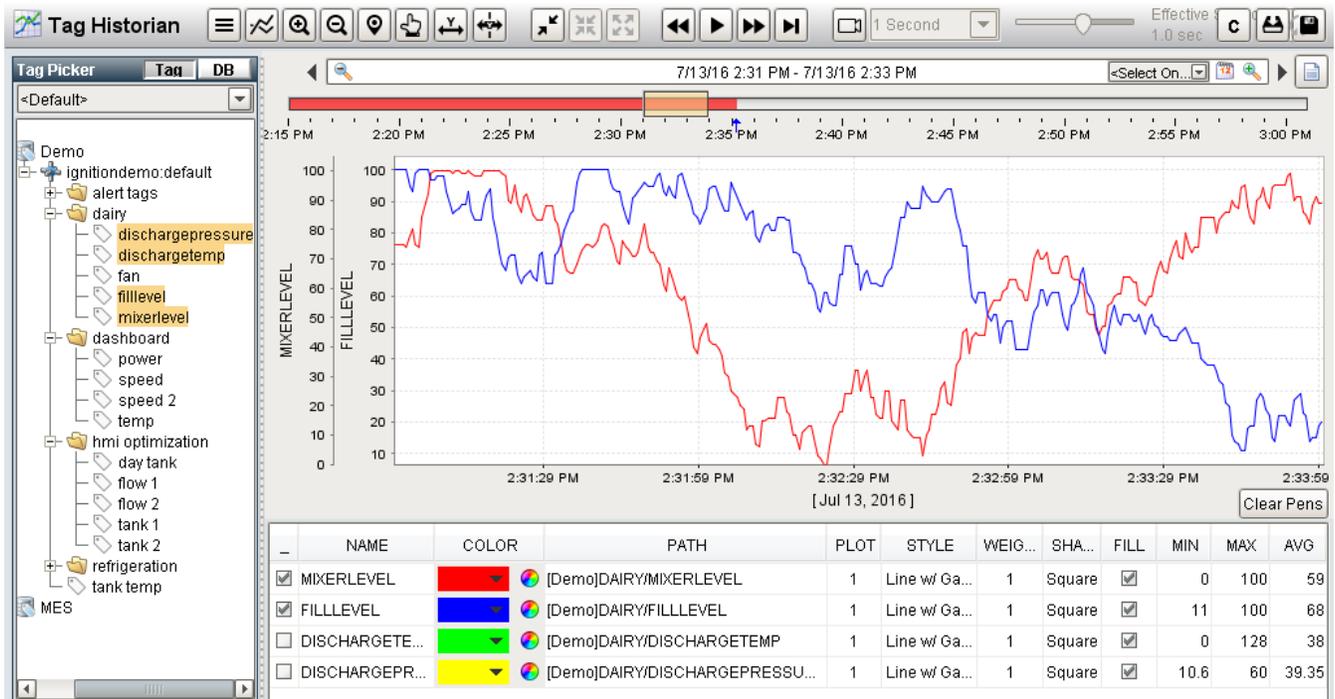Create screens to monitor motor status, show digital displays, and control machines.

Dashboards

Create dashboards for quick and easy to read data at a glance.

Historical Trending

Create powerful trending charts that allow your users to see what they need, compare data, and look back through any history.

Templates

Create powerful templates and let Ignition do the work for you. Ask for as many as you want and Ignition will fill in everything for you.

Alarm Status

Quickly monitor critical processes at a glance. Change setpoints, acknowledge events, and receive notification when something goes wrong.

Database Manipulation

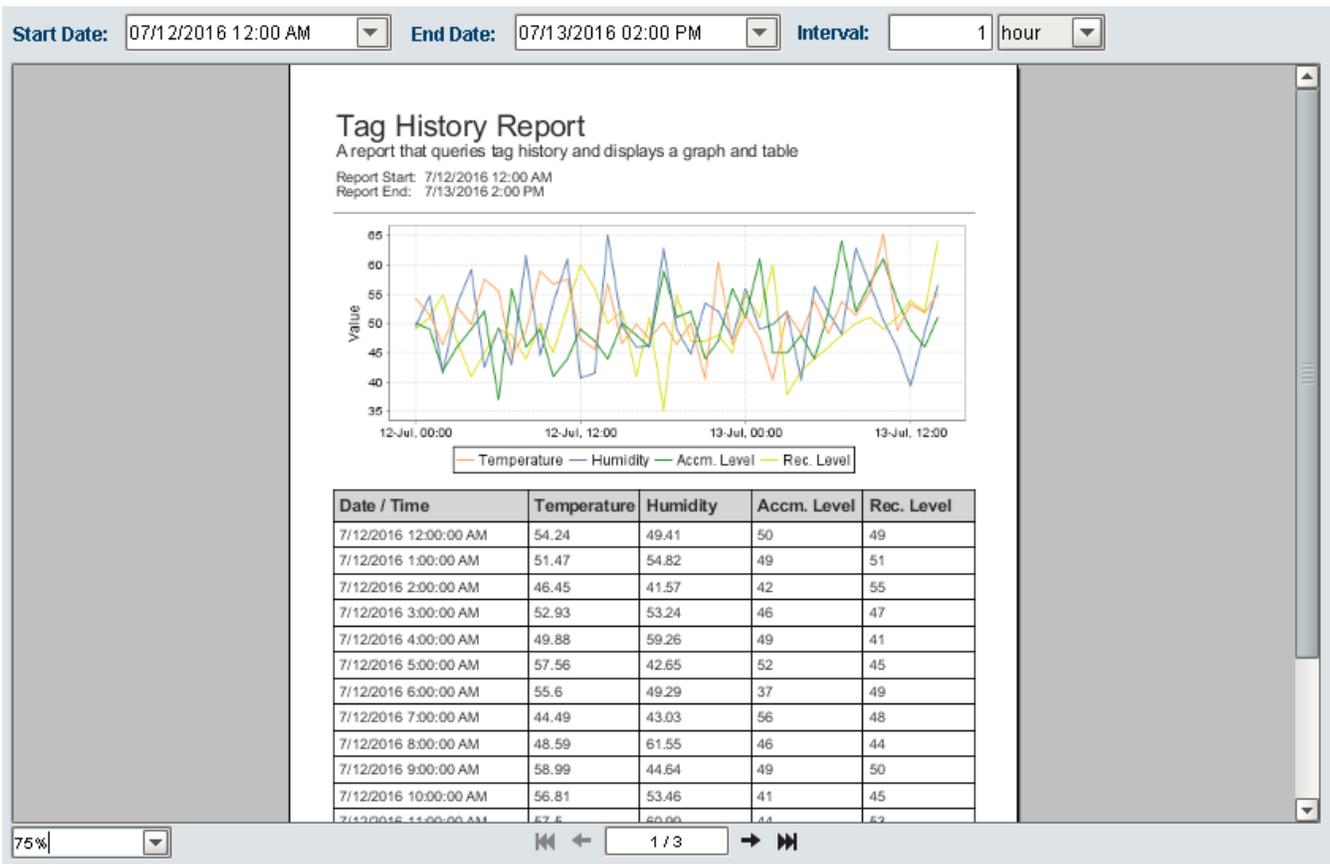Interact directly with your databases. Connect to existing ERP and inventory systems, read or modify data, and more.

Search: [   ]   **Location:** <Select One> ▼ X

Name	Description	Location	Quantity
100HP Motor	Some descripton	7654	10
250HP Motor		Warehouse 12	10
500HP Motor		Bin7	19
55 HP Motor	some motor	Warehouse 12	4
66 HP Motor		Warehouse 12	5
750HP Motor			5
88HP Motor	some motor	Warehouse 12	2
AB PLC		California	10
Battery		Bin3	8
Battery		Bin7	100
Compressor		bin5	5
Fortress of Solitude	It's cold	Warehouse 13	1
Harina	Molino de Harina	Cali	1,000
junk		Warehouse 13	1
PHDialiasis CVFRTY	sgdshdt	Tijuana	50
PLC Siemens		DF	41
PLC5	some plc	Warehouse 12	4
Some name	Adding some stuff	Bin3	999
UNitornix PLC	Descripción en español		5
Widget	Test	bin5	9

➕ Add   ✏ Edit   ✖ Delete

Reporting

Create dynamic PDF reports in your clients. Allow users to select data ranges, report types, and more. Print, save, and email your reports on the spot.

Start Date: 07/12/2016 12:00 AM ▼   **End Date:** 07/13/2016 02:00 PM ▼   **Interval:** 1 hour ▼

Tag History Report
A report that queries tag history and displays a graph and table

Report Start: 7/12/2016 12:00 AM
Report End: 7/13/2016 2:00 PM

— Temperature — Humidity — Accm. Level — Rec. Level

Date / Time	Temperature	Humidity	Accm. Level	Rec. Level
7/12/2016 12:00:00 AM	54.24	49.41	50	49
7/12/2016 1:00:00 AM	51.47	54.82	49	51
7/12/2016 2:00:00 AM	46.45	41.57	42	55
7/12/2016 3:00:00 AM	52.93	53.24	46	47
7/12/2016 4:00:00 AM	49.88	59.26	49	41
7/12/2016 5:00:00 AM	57.56	42.65	52	45
7/12/2016 6:00:00 AM	55.6	49.29	37	49
7/12/2016 7:00:00 AM	44.49	43.03	56	48
7/12/2016 8:00:00 AM	48.59	61.55	46	44
7/12/2016 9:00:00 AM	58.99	44.64	49	50
7/12/2016 10:00:00 AM	56.81	53.46	41	45
7/12/2016 11:00:00 AM	57.5	60.09	44	53

75% ▼ |◀ ← [1 / 3] → ▶|

Windows

Windows are the basic building blocks for all of your screens. There are several types of windows in Ignition and they can be arranged however you like. You get to choose what windows are available on startup and how your navigation is set up. All components in your screens will live inside your windows. You can create and re-use windows easily inside of Ignition. Passing custom parameters into windows allows you to create once and re-use your screens. You can set windows to open once, or create popup windows with multiple instances so users can compare live values.

New Main Window   New Popup Window   New Docked Window

Navigation

You can set up navigation however you like in Ignition. There are several options available in the project templates that you can take advantage of, or you can create your own using a map with clickable zones, or whatever you like.

- **Back/forward buttons**

- **Navigation tab strips**

- **Multi-tier navigation**

## Components and Property Bindings

Components will take up the majority of your screens, and you can put them together in any way you like. Components are made up of properties that control the looks, behavior, and data. For example, a tank has a level, capacity, a liquid color, and more. An input field has text, font, an image, etc. You can even add your own custom properties to enhance components and create additional functionality. Components can be combined in simple groupings, database editor forms, or anything else you can think of.
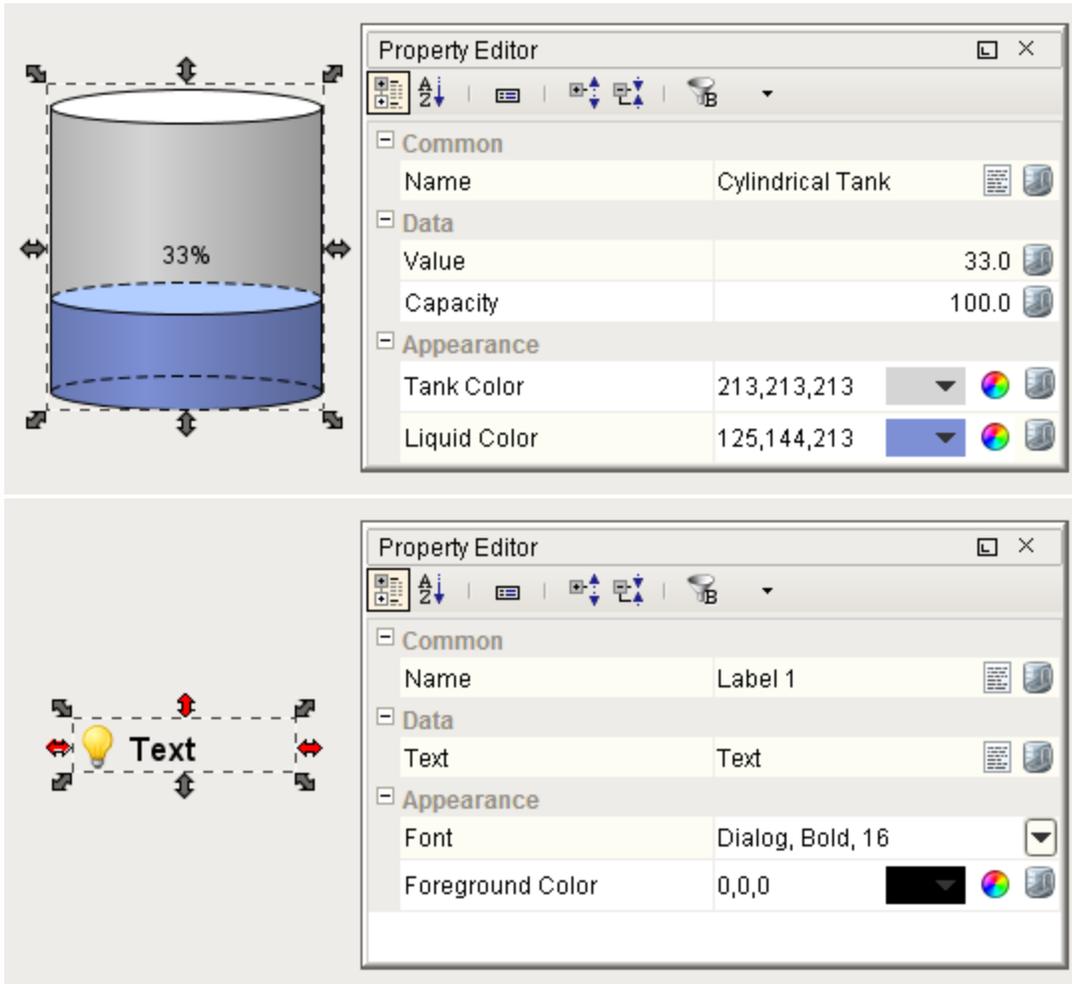
The power of bindings comes from the variety of different binding types. Bindings are how you can control component properties dynamically. Instead of setting a label statically, the text might change based on a PLC value or on-screen selection. There many ways and bind your components to show values from PLCs, databases, other components, or user input. You can even bind some or all of the properties on each component. You can bind component values using:

- **Other properties**: Property Binding, Cell Update Binding, Component Styles
- **Tags**: Tag Binding, Indirect Tag Binding, Tag History Binding
- **Expressions**: Expression Binding
- **Databases**: DB Browse Binding, SQL Query Binding
- **Functions**: Function Binding
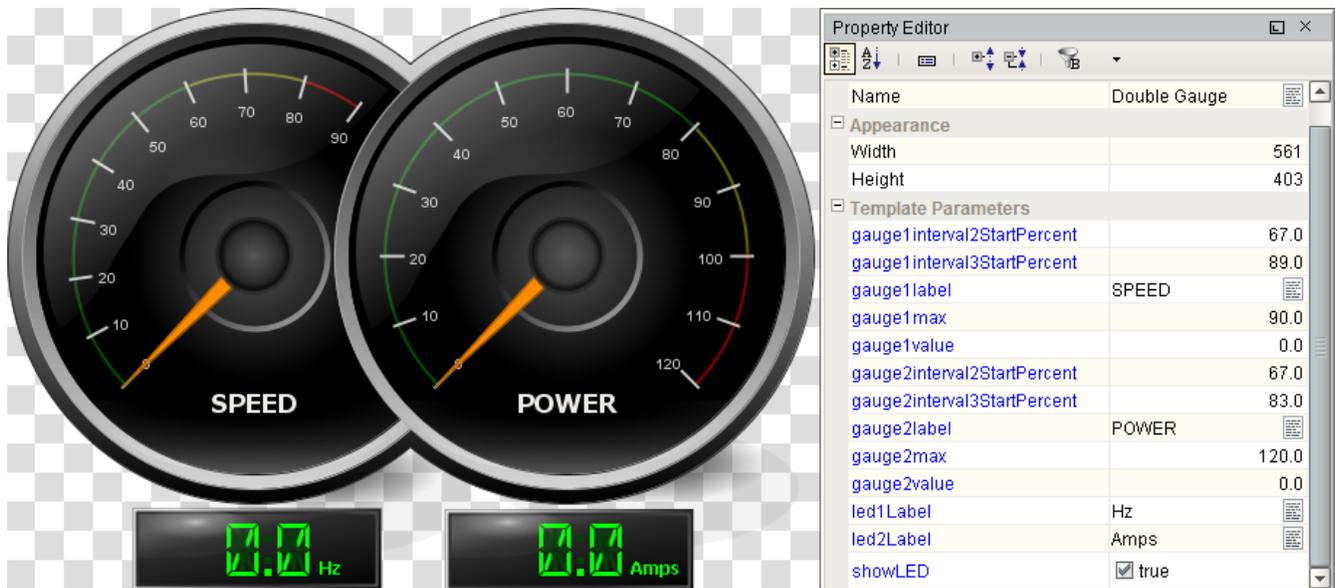
In addition to standard components, Ignition has a set of 2D Drawing tools to allow you to create your own graphics or use Symbol Factory to drag and drop SVG images into your windows. Just like any other component, you can use property bindings and set up custom properties to add whatever functionality you need.
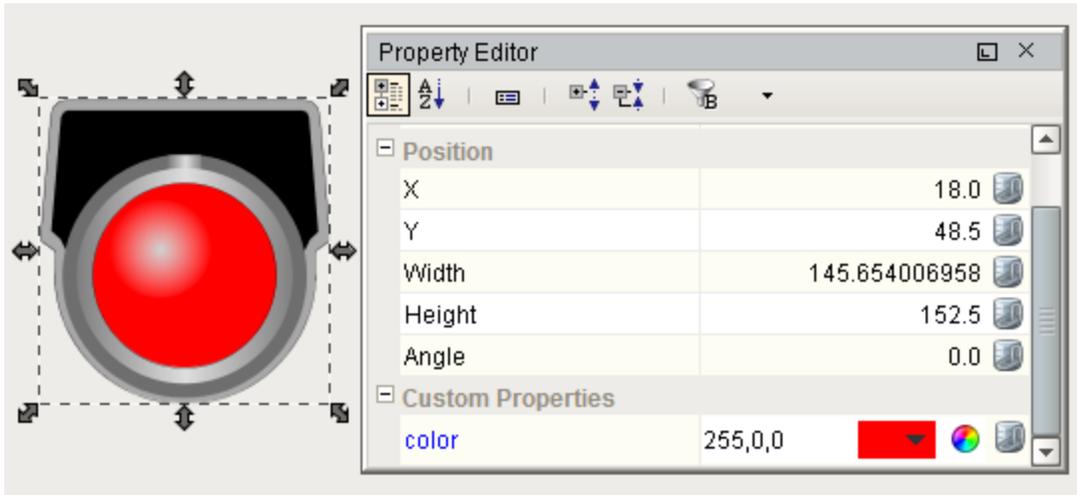
Templates

Components can be combined to create Templates. These are re-usable objects that can be set up once and used throughout your project. The real power of templates comes from the ability to modify it in one location while affecting all of the instances used throughout the project. Most templates use one or more custom properties (Template Parameters) to tie data from a window to the internals of the template.

Open our Cloud Templates portal in the Designer and view and download lots of templates like the one below:

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